

End of Activity of Any Type of Active Wound by Low Level Laser Therapy by Lllt (Eka) Specialized Method

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Acne is an inflammatory disorder of pilosebaceous units and is prevalent in adolescence. The characteristic lesions are open (black) and closed (white) comedones, inflammatory papules, pustules, nodules and cysts, which may lead to scarring and pigmentary changes. The pathogenesis of acne is multifactorial and includes abnormal follicular keratinization, increased production of sebum secondary to hyperandrogenism, proliferation of *Propionibacterium acnes* and inflammation [1]. History and physical examination can help determine if there is an underlying cause of the acne, such as an exacerbating medication or endocrinologic abnormality causing hyperandrogenism (e.g., polycystic ovarian syndrome). Other dermatologic manifestations of androgen excess include seborrhea, hirsutism and androgenetic alopecia. Endocrinologic testing is not ordered routinely for women with regular menstrual cycles. 2, 3 Older women, especially those with new-onset acne and other signs of androgen excess (e.g., hirsutism, androgenic alopecia, menstrual irregularities, infertility), should be tested for androgen excess with measurements of total and free serum testosterone, dihydroepiandrosterone, and luteinizing and follicle-stimulating hormone levels. 5 Pelvic ultrasonography may show the presence of polycystic ovaries. 5 In prepubertal children with acne, signs of hyperandrogenism include early-onset accelerated growth, pubic or axillary hair, body odour, genital maturation and advanced bone age. Treatment for acne vulgaris should aim to reduce severity and recurrences of skin lesions as well as to improve appearance. The approach depends on the severity of the acne, the treatment preferences and age of the patient, and adherence and response to previous therapy [2]. Laser is meant to amplify light by induction emission, and it can be briefly stated that some materials can absorb the radiation energy and then radiate it into the light when this occurs naturally in the atom. Speech is called spontaneous emission, and what you know in nature as light is the result of spontaneous emission [3].

Effects Low-Level-Laser-Therapy of the Blood One under laser blood irradiation, anti-inflammatory effects was observed that improved the immunologic activity of the blood 1.2. A fundamental finding was the positive influence on rheological properties of the blood which is of greatest interest to surgery, angiology and cardiology in particular 2. A diminishing tendency of aggregation of thrombocytes and an improved deformability of erythrocytes result in an improved oxygen supply and with that to a decrease of partial carbon dioxide pressure, which is particularly relevant

to wound healing 3. Furthermore, the activation of phagocytic activity of macrophages was proved in conjunction with structural modifications. A positive effect on the proliferation of lymphocytes and B and T-cell sub populations could be verified too [4].

The Blue Laser

The blue laser has very positive effects on our immune system. Furthermore, wound healing is improved significantly. There is also a strong anti-inflammatory and anti-bacterial effect as well as positive influence on hormone harmonization and pain reduction. It improves cell perfusion and oxygen uptake. The biochemical mechanisms are quite complex. However, there is an improvement of ATP metabolism (leading to more cell energy) and positive influence on hemoglobin nitric oxide (HbNO) release after blue laser blood irradiation.

- Stimulates complex I of the mitochondrial respiratory chain (NADH-dehydrogenase complex).
- It has very strong anti-bacterial effects by destroying microorganisms of all kinds in the blood (by absorption of bacterial porphyrins and by production of reactive oxygen species).
- Releases NO from the NO-Hb of micro circulation (Nitric Oxide).
- Can be used for photodynamic tumor therapy in combination with Curcumin as photosensitizer.
- Can be used for anti-microbial photodynamic therapy (for bacterial, viral and parasitic diseases) in combination with Riboflavin as photosensitizer [5].

Method

Due to the blue and red laser light properties, we decided to be able to treat refractory active acne using a cold laser.

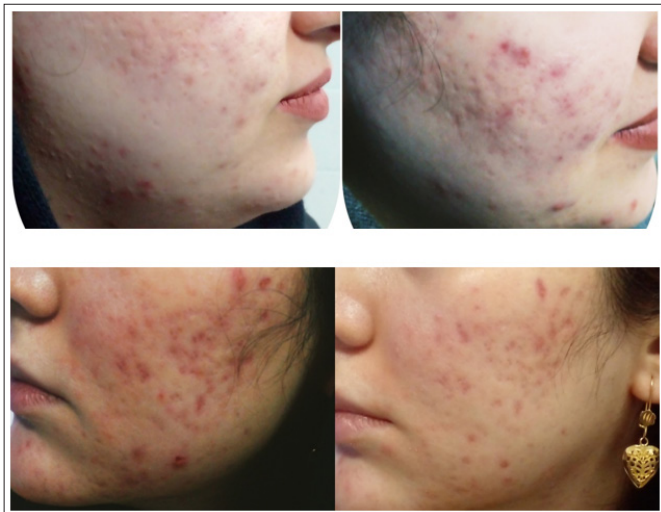
In this way, based on age, gender and type of acne, sessions were determined, which ranged from 10 to 20 sessions, 2 to 4 days a week.

Then, all the clients were subjected to blue and red lasers, which have a wavelength range of 405 to 810 nm with a variable power of 5 to 200 mW.

The changes were visible even in the initial sessions with the reduction of inflammation and pain, which was deactivated by the continuation of acne treatment and their scars were repaired,

which was done without pain and without care.

Therefore, all the clients were very well received so that their treatment was done well with a high degree. Along with this method, the skin of the face was brighter and the pH was adjusted, and this helped the treatment, hence this treatment method called EKA We named it.



Conclusion

This is a new method that was done only by laser without using LED light for the first time because the previous methods were combined and this method was done only with laser. The advantages of this method are being safe, painless, heat-free and careless, and the results of the treatment are observed in the initial sessions. In addition to treating acne, the scar is also repaired. This method can be expanded and with the cooperation of laser companies, we can produce special devices for the immediate and safe treatment of all types of acne.

Conflict of Interests

The authors declare no conflict of interest

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